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## CURRENCY POLICY AND THE EUROPEAN WAR

The events which have been taking place in European money markets since the outbreak of war between Austria-Hungary and Servia have brought into striking relief the magnitude and extreme delicacy of the problems with which the modern banking mechanism has to deal. They have illustrated in an interesting manner, in spite of the temporary breakdown in the mechanism of the exchanges between nations, several principles of currency regulation in Europe which represent a comparatively recent evolution. The suspension of gold payments by the central banks was an almost inevitable consequence of military conflict on a large scale, and conditions would have been much worse if for the past decade or more each of the central banks of issue had not pursued resolutely the policies of concentrating the gold stock of the country in their own hands; of substituting notes as far as it seemed advisable for gold in circulation; and of giving to these notes the legal-tender quality. There is little reason, in view of the progress of monetary science in recent times, to fear that the governments now involved in the war will abuse the power to issue paper currency, as was the case with some of them two or three generations ago, nor is it necessary that the suspension of gold payments should in itself cause a great depreciation in the medium of domestic exchange in the country where it is issued.

The principles of monetary policy which are to be examined in this article have been gradually receiving recognition in practical form in the legislation of European states, but only here and there has it been recognized clearly that they form harmonious parts of a complete policy of the regulation of currencies, which is superseding the principles which prevailed in the infancy of the development of money and banking. The principles which have been thus evolved may be summed up under the following heads:

1. The gold reserves of a country should be concentrated chiefly in the central bank of issue, as a guaranty fund for the maintenance of credit and for meeting adverse foreign balances, and should not be diffused largely in the form of gold in circulation.

2. The currency in actual circulation outside the banks may properly consist, so far as the customs of the community permit, in fiduciary paper or in token coins.

3. In order to maintain the circulation of paper and token coins, and prevent unnecessary demands for their redemption, they should be given, within proper limits, the quality of legal tender in the payment of debts.

These three propositions form consistent parts of a definite currency policy.

#### I. CONCENTRATION OF THE GOLD STOCK

In view of the fact that domestic exchanges represent, in effect, the barter of goods and services against goods and services, the essential purpose of the gold stock is merely to guarantee the fulfilment of contracts according to their terms, by affording a reserve in a commodity whose value is never called in question when the values of other commodities are impaired by changes in the relations of demand and supply. While the proper percentage of gold to be held against liabilities cannot be fixed arbitrarily, it has been the growing tendency of the central banks of issue to hold a fund adequate to meet the impairment in other forms of credit.

It serves no useful purpose that the fund which protects credit should be weakened by leaving parts of it in the hands of the public, simply as a tool of exchange. For the individual, a deposit credit in a sound bank represents gold just as absolutely for the practical

purposes of internal payments as coins in his cash drawer; if he requires any considerable amount of currency, he is as well equipped if he receives the amount in bank notes as if he receives it in gold coin. The essential requirement in a sound currency system is that the notes and deposit liabilities of the banks shall be of unquestioned convertibility into gold for the purposes for which gold is required, even if slight obstacles intervene between the holder of a note and his ability to obtain gold.

These considerations justify, therefore, the concentration of the national gold stock as completely as possible in the custody of the bank of issue. For minor reasons, such as the saving of abrasion and the moral effect of a large gold stock, this would be true even if bank notes were issued only dollar for dollar in gold, like the gold certificates of the United States. This is, in effect, pretty nearly the character of the supplementary issues of notes which were made prior to the war by the Bank of England, by the Imperial Bank of Germany when additional notes were issued upon gold in order to avoid the payment of the tax on excess circulation, and by the Canadian banks by means of the deposit of gold in a central reserve fund under the law of 1913.<sup>1</sup>

Where the paper circulation rests in a measure upon credit as well as gold, it is even more desirable that the gold stock should be concentrated in the central bank of issue and should bear a ratio to outstanding notes large enough to inspire confidence in their parity with gold and in the ability of the bank to meet all its credit obligations. When the loans of the bank are made upon short-term commercial paper, it has at its command the means of quickly converting its assets into gold or reducing the amount of its gold obligations as such paper is paid off. This may occur by the payment of loans in notes, which reduces the note liability of the bank, or by their payment in checks, which reduces its deposit liability.

<sup>1</sup> It is pointed out by Professor Keynes that "a preference for a tangible gold currency is no longer more than a relic of a time when governments were less trustworthy in these matters than they are now, and when it was the fashion to imitate uncritically the system which had been established in England and had seemed to work so well during the second quarter of the nineteenth century."—*Indian Currency and Finance*, p. 73.

It is the function of the central bank, however, to maintain an excess of gold above the immediate requirements of normal conditions, in order that it may be able to increase its loans and discounts and its issues of notes in times when other banks are subjected to pressure and are making an effort to increase their cash resources. To this end, it is of importance that the gold stock of the country should be concentrated as far as possible in the custody of the central bank, because it affords a means of extending a larger amount of credit than if the gold were put into circulation. Importations and purchases of gold by the central bank create an adequate reserve fund against a much larger amount in notes or other liabilities, while the direct employment of the gold, or even of notes secured in full by gold, as in the case of the Bank of England, permits only the grant of additional credit to the amount of the new gold obtained. If a reserve of 40 per cent in gold is considered a sufficient minimum, every dollar for which notes can be substituted for gold in circulation gives to the bank a power of granting credit two and a half times as great as the direct payment of the gold into the circulation.

The concentration of the national gold stock in the hands of the central banks, therefore, makes it a much more powerful instrument of credit than its diffusion in the circulation. The banks are able, under normal conditions, moreover, through their control over the rate of discount and their influence in the money market, to take the most effective measures for increasing and protecting the gold stock and employing it to the best advantage in safeguarding the entire structure of credit.

## II. GROWTH OF SMALL NOTE ISSUES

The use of notes of large denominations secured by a percentage of gold has long been an accepted principle of sound banking. The question which has aroused debate, both in the early history of note issues and in more recent times, has been how low the minimum denomination of notes issued should be allowed to descend. There was an impression in the latter half of the eighteenth and in the beginning of the nineteenth century that the issue of notes of low denominations involved special dangers, both

for the banks and for the public. In Great Britain, the subject was befogged, before the restriction of cash payments in 1797, by the unregulated issues of country bankers, which led to the prohibition in 1775 of notes below £1 and in 1777 of notes below £5.<sup>1</sup> The restriction of cash payments practically compelled the issue of notes for £1 by the Bank of England, to fill the void caused by the disappearance of coin, and it was natural that the resumption of cash payments by the bank should be accompanied by efforts to contract the circulation of small notes. Scotland, however, steadfastly refused to part with the £1 note, because it had been such a useful instrument in extending credit for small amounts and developing her domestic industries. Even at the present time substantially two-thirds of her note circulation, as well as that of Ireland, is in notes below £5. In France, the issues of the Bank of France were originally restricted to the denominations of 1,000 francs (\$193) and 500 francs (\$96.50),<sup>2</sup> making them in effect rather a substitute for the check than a familiar means of carrying on retail transactions.

It is not necessary to dwell upon the controversies which occurred in England and Scotland on the question of the £1 note, illuminated though they were by the wit of Sir Walter Scott and other eminent writers, because the issues involved in the discussion of note denominations in the advanced commercial countries are essentially different at the present time from what they were then. The value of the small note as a means of extending credit and blazing a path for the deposit system has declined in relative importance as the dangers of small note issues have diminished with the accumulation of adequate reserves and better understanding of the natural limitations of the use of credit in this form. Two of the dangers of the small note much dwelt upon in early times have become chimeras under modern conditions—the fear that such notes, if widely scattered in the hands of the ignorant, would be presented in excessive amounts for redemption in periods of distrust, and the danger of excessive counterfeiting.<sup>3</sup>

<sup>1</sup> See Graham, *The One Pound Note*, 2d ed., 1911, pp. 343-46.

<sup>2</sup> Laborie, *Paris sous Napoleon: Le monde des affaires*, p. 142.

<sup>3</sup> Cf. Graham, *op. cit.*, pp. 354-61.

While reasonable freedom in the issue of bank notes is still essential to the proper functioning of the credit mechanism, the question of the denomination of the notes has become, in the capitalistic countries, essentially a question of currency and banking policy, having only a remote relation to the classical discussions of the first half of the nineteenth century. Whether it tends to a stronger economic position to have the national gold stock diffused through the circulation or to have it concentrated in the vaults of the central bank of issue is the determining factor, to which other considerations have become subsidiary. On this head there has been a distinct trend in recent years among leading commercial countries toward the abandonment of the old theory of a gold-saturated circulation and toward the substitution of the policy of gold concentration by the increase in the issue of notes of small denominations.

The old theory that the monetary system of the country was strengthened by keeping the circulation saturated with coin prevailed so long that the minimum denomination of the notes at the Imperial Bank of Germany prior to 1906 was 100 marks (\$23.80); and the minimum denomination, up to the outbreak of the present war, was still, at the Bank of France, 50 francs (\$9.65); at the National Bank of Switzerland, 50 francs (\$9.65); and at the Bank of England, £5 (\$24.43). In Austria-Hungary, however, the minimum denomination of bank notes was 10 crowns (\$2.03); at the National Bank of Belgium, 20 francs (\$3.86); at the Bank of the Netherlands, 10 gulden (\$4.02); at the Imperial Bank of Russia, 1 rouble (\$0.51½); and in Denmark, Norway, and Sweden, 5 crowns (\$1.34).

It is not, however, the legal minimum of note issue which is significant of recent changes in monetary policy. It is the recognition, shown by actual increase in the issue of small notes, of the fact that currency has become more and more a token, and that it is of minor importance, for the purpose of insuring confidence and maintaining its circulation, whether its character as a medium of exchange is impressed upon a disk of gold of full intrinsic value or upon a piece of silver or paper.

Paper currency of low denominations was for a long time under a cloud, because it was likely to be resorted to in periods of financial

distress, and usually by governments which had exhausted their resources for obtaining capital, rather than by solvent banks. It is not proposed to discuss here the subject of government issues, which have now been discarded by strong and prudent governments except for a small substratum of the circulation. It is proposed only to discuss the changes in recent years in the policy of leading banks of issue, because it illustrates changes in banking policy which reflect, perhaps more or less unconsciously, changes in monetary theory.

The State Bank of Russia has afforded an interesting example, during the past two decades, of the abandonment of the theory of a circulation saturated with gold and the substitution of the policy of a token currency of paper protected by a strong gold reserve concentrated in the central bank. The Russian monetary reform was practically completed in 1897. At that time the amount of gold in circulation in Russia, outside the Imperial Bank and the Treasury, was calculated at only 36,000,000 roubles (\$18,540,000); the gold belonging to the bank was 1,091,700,000 roubles (\$562,000,000); and the total circulation of credit roubles was 1,121,300,000 roubles (\$577,000,000). During the next few years the policy was pursued of pumping gold steadily into the circulation, while the quantity of bank notes was restricted. The result was that at the beginning of 1904 there was in circulation in the hands of the public gold to the amount of 774,800,000 roubles, while the circulation of bank notes was only 630,000,000 roubles.

Beginning in 1904, however, a new policy was inaugurated, involving the issue of notes more freely and the withdrawal of the gold circulation into the coffers of the Imperial Bank. Notes for one rouble were gradually retired, as representing too low a denomination for paper, and in order to afford a proper vacuum for subsidiary silver. The issues of the next higher denominations were, however, largely increased. The denominations of Russian notes, below the amount of 25 roubles, are 1 rouble (\$0.51½); 3 roubles (\$1.54½); 5 roubles (\$2.57½); and 10 roubles (\$5.15). So steadily was the new policy carried out that at the beginning of 1909 notes of these denominations had come to constitute an amount equal to 46.5 per cent of the total paper circulation. The note circulation in the meantime, which had been kept practically uniform at



630,000,000 roubles from the beginning of the year 1900 down to near the close of 1904, was nearly doubled. This was accomplished by reducing considerably the amount of gold in circulation and adding the new gold obtained by exchange operations and by purchase in the London market to the large gold fund of the Imperial Bank. Within the five years ending January 1, 1909, the gold in circulation decreased by 214,000,000 roubles, while outstanding note issues increased by 570,000,000 roubles, and the gold stock of the bank increased by 317,000,000 roubles (\$161,000,000). Within the next five years, while gold in circulation on January 1, 1913, had increased by only 58,500,000 roubles (\$30,120,000), the gold in the bank reserves had increased by 330,000,000 roubles (\$170,000,000) and was offset by an increase in outstanding bank notes of 406,700,000 roubles (\$209,450,000).<sup>1</sup> Thus, in a most obvious sense, the Bank of Russia enlarged and protected its gold stock by the development of the issue of small notes.

In Austria-Hungary, which adopted monetary reform at about the same time as Russia, it was necessary to get rid of an accumulation of depreciated government paper before gold or bank paper could be put largely into circulation. The community indicated at the beginning of the reform a preference for the paper to which it had so long been accustomed, in spite of the fluctuations in its gold value which had taken place during the period of specie suspension. It was not until the year 1901 that the old government paper was substantially eliminated and the Austro-Hungarian Bank was able to issue its own small notes. The three denominations issued for low amounts were for 10 crowns (\$2.03), 20 crowns (\$4.06), and 50 crowns (\$10.15). These three issues together have constituted almost continuously since 1902 about 50 per cent of the total circulation of notes. The bank has refrained from the issue of gold coin to the public, so that the circulation consists almost entirely of notes and subsidiary silver and minor coin. By keeping a large portfolio of foreign bills and by the control over foreign exchange which was assumed in 1901, the bank seeks to maintain the parity of the paper circulation without trenching upon its stock of gold.<sup>2</sup>

<sup>1</sup> Raffalovich, *Le marché financier en 1912-13*, p. 463.

<sup>2</sup> Decharme, *Les petites coupures des billets*, pp. 103-6.

The really significant cases, however, of the substitution of small notes for gold in order to strengthen bank reserves are those of Germany and Belgium. In Germany the policy adopted at the formation of the Imperial Bank in 1875 was that of saturating the circulation with gold, in accordance with the tendency which then prevailed in almost all countries which had adopted the gold standard. With this in view the denominations of the notes of the Imperial Bank were fixed at 1,000, 500, 200, and 100 marks (\$23.80). The Reichstag at that time voted unanimously the prohibition of notes below 100 marks. Under this policy, gold came to circulate freely in Germany, but the Imperial Bank was under persistent pressure from the inadequacy of its reserves. There presently arose, also, a serious demand for larger issues of small denominations of currency in some form, which was partially supplied by notes for 50, 20, and 5 marks, issued by the government against the gold war fund kept in the Castle of Juliusturm at Spandau. In spite of the relative increase in the ratio of the smaller to the larger denominations of these notes to meet the growing population and volume of business of the empire, complaints continued to be heard of the deficiency of small currency, which was declared to be much needed for the payment of wages.<sup>1</sup>

Finally, the barrier of the law of 1875 was removed by a law of February 24, 1906, by which the Imperial Bank was authorized to issue notes of the denomination of 50 marks (\$11.90) and 20 marks (\$4.76). It was the promise of the government that these issues should be kept within the limit of 300,000,000 marks (\$71,300,000), and this promise was kept until the year 1912.<sup>2</sup> In the summer of that year, the amount of notes of both denominations still stood as low as 357,143,540 marks, and constituted only 17.1 per cent of the total note issue. With the expressed desire of the imperial government about that time to have strengthened at all hazards the gold reserve of the bank, notes of 20 and 50 marks were put in circulation whenever opportunity offered, and, within the eighteen months ending with the close of the year 1913, the amount was nearly doubled. While the total circulation increased only from 2,087,650,790 marks on June 29, 1912, to 2,593,444,840 marks on

<sup>1</sup> *Ibid.*, p. 74.

<sup>2</sup> *Ibid.*, p. 85, note.

December 31, 1913, the circulation of notes for 20 and 50 marks increased from 357,143,540 marks to 681,822,040 marks, which was 26.3 per cent of the total circulation. Apparently the intended purpose of putting small notes in circulation, in order to draw a corresponding amount of gold into the Imperial Bank, was fully accomplished, for the increase in the note issue of more than 300,000,000 marks was marked by the increase in the same period of the gold holdings of the bank from 887,971,000 marks (\$211,000,000) to 1,169,970,000 marks (\$278,000,000), or by 282,000,000 marks (\$67,000,000).

Belgium, in spite of the possession of a strong central bank, had difficulty for many years in preventing the exportation of gold and silver coins. Gold practically disappeared from circulation and silver 5-franc pieces followed in its track. The government has recently taken several measures of more or less arbitrary character to check the export of silver coin for the exclusive purpose of making a profit on exchange. In the meantime, however, it was found necessary, as early as 1894, to begin the increase of the issues of notes for 50 francs and 20 francs, in order to fill the void in the circulation caused by the loss of gold and silver. It should be noted that the note for 50 francs (\$9.65) hardly falls within the denomination which tends to expel gold. The increase in notes of this denomination has not yet been as rapid as in those for 20 francs (\$3.86).

In 1870, when the total circulation of the National Bank of Belgium was less than one-fourth of the amount which it has since attained, the amount of notes for 50 francs was only 7,298,000 francs, and of notes for 20 francs, 15,444,000 francs, the combined amount representing only 12.13 per cent of the total note circulation.<sup>1</sup> By 1894 this proportion had risen to 18.64 per cent, and in 1904 to 25.56 per cent. The evil of an adverse exchange with Paris continued, however, to work unfavorably upon the stock of coin, and issues of notes for 20 francs and 50 francs rose in 1910 to 30.92 per cent of the total note circulation, and in 1913 to 34 per cent. For the latter year, the average circulation of notes for 50 francs was 113,410,850 francs and of notes for 20 francs, 228,519,340 francs.<sup>2</sup> Within three years, the average note circulation of all

<sup>1</sup> Ducharme, *op. cit.*, p. 110.

<sup>2</sup> *Assemblée générale des actionnaires*, February 23, 1914, p. 18.

denominations increased from 826,272,220 francs to 1,004,121,190 francs, or by about 178,000,000 francs, of which more than 86,000,000 francs was in notes of the two lower denominations.

It is noteworthy, however, that within this same period, the bank increased its gold stock from 125,694,390 francs on December 31, 1910, to 249,026,688 francs on December 31, 1913, while the amount of foreign gold bills and subsidiary silver held in the reserve was not greatly diminished. The increase in the gold stock was obtained chiefly through direct purchases by the bank in Paris and was perhaps a necessary consequence of the impoverishment of the active circulation of gold and silver; but the net effect upon the relations between the money in circulation and the metallic reserve of the bank was the substitution of paper for gold in circulation and a more than equivalent increase in the gold stock of the central institution, as in the case of Russia, Austria-Hungary, and Germany.

Although Belgium found in the disappearance of her gold and silver coins, under the influence of adverse exchanges, a vacuum for the increase of her small notes, the situation of France and Switzerland was handicapped in this respect by the large amount of silver 5-franc pieces and subsidiary silver remaining in their circulation. In both countries, prior to the present war, the smallest note was for 50 francs (\$9.65), which cannot be regarded as a low denomination. It would probably have been possible to issue a limited amount of notes in these countries of the denominations of 20 francs (\$3.86) and to draw a corresponding amount of gold into the central bank of issue. It would be more difficult, however, to keep in circulation notes of a lower denomination than 20 francs, because they would come in conflict with the large amount of silver with which France and other countries of the Latin Union were loaded down at the time of the suspension of free coinage about 1873. In Switzerland, the opportunity to issue notes for 50 francs has apparently been availed of nearly to the point of saturation, the average proportion of such notes for 1913 having been 36.09 per cent of the total note circulation of the National Bank of Switzerland, and the proportion at the close of the year, 35.16 per cent.<sup>1</sup>

<sup>1</sup> *Sixième rapport de la Banque Nationale*, 1913, p. 33.

France is in the happy position of possessing in her central bank one of the largest gold stocks in the world, while at the same time her internal circulation is surcharged with gold to an amount estimated at nearly \$600,000,000. For her, therefore, the problem of drawing gold from the circulation into the bank was less pressing. The subject of the issue of notes for 20 francs by the Bank of France has been discussed, notably on the occasion of the crisis of 1907 in the United States; but the conclusion seemed to have general approval that such a step should be taken only in case of war. It might then be necessary, as put by M. Alglave, to issue notes "to prevent our 20-franc pieces from supporting the enemy's loans."<sup>1</sup> In the meantime, the congestion of silver which has handicapped France since 1873 has been gradually relaxing by the disappearance of the coins of the Latin Union in the French and Belgian Congo, the melting-down of 5-franc pieces for subsidiary coins, and the absorption of a larger volume of small money by expanding trade. The stock of silver in the Bank of France, which was more than \$250,000,000 at its maximum in 1892, fell almost without interruption to about \$160,000,000 at the close of 1910, and below \$125,000,000 in the summer of 1914.<sup>2</sup> Obviously silver has ceased to be a menace to the great gold reserve of \$800,000,000 in the bank, and does not preclude the issue of small notes in the face of commercial and military needs.

### III. MAKING BANK NOTES LEGAL TENDER

It is an almost logical consequence of the effort to husband gold by substituting bank notes as the medium of exchange that the notes should be given, as far as practicable, the qualities which make them acceptable as a substitute for money. One of the most obvious means of accomplishing this purpose is to make the notes legal tender in domestic transactions. The notes of the Bank of England were made legal tender, except at the bank, at the time of the revision of the charter in 1833. The argument was made, even at that early date, that if the notes possessed the legal-tender quality they could be used by the country banks for the redemption

<sup>1</sup> See Decharme, *op. cit.*, p. 314.

Cf. Conant, *A History of Modern Banks of Issue*, pp. 72-74.

of their own notes and the pressure on the gold stock would be thereby diminished.<sup>1</sup>

The notes of the Bank of France were made legal tender only at the time of specie suspension in 1848, but this quality was withdrawn when resumption took place under the law of August 6, 1850. The notes were again made legal tender on August 12, 1870, soon after the outbreak of the war with Germany. This step was not taken because of a run for gold, nor at the request of the bank, but was adopted by the government with the view of keeping the gold fund intact until the necessity for its use should become more pressing.<sup>2</sup> In order to prevent abuse of the power of issue during specie suspension the policy was adopted of fixing a maximum limit of issue, and this policy has been continued down to the present time, although the limit has been raised by the government whenever it has been approached by the amount of notes outstanding. Under this restriction, the notes of the Bank of France have continued to be a legal tender in France in spite of the fact that the bank has always had the right to redeem them wholly or in part in silver coin instead of gold.

The notes of the Austro-Hungarian Bank were legal tender during the long period of specie suspension down to 1892 and have continued to be so under the monetary reform. In the case of the National Bank of Belgium, the notes were legal tender only "so long as they are redeemable at sight in legal coin"; but this safeguard has necessarily been suspended during the present financial chaos. Here, as in France, the privilege belongs to the bank to redeem notes in silver as well as in gold. The notes of the bank are payable in coin at sight, at its offices in Brussels, but payments may be deferred at the agencies until there has been time to receive the necessary funds.<sup>3</sup> The notes of the National Bank of Italy have long been legal tender, in spite of specie suspension, and the legal-tender quality belongs by law to the notes of the Royal Bank of Sweden, the Bank of Norway, the National Bank of Denmark, and to the National Bank of Switzerland, under the law of 1905.

<sup>1</sup> *Ibid.*, pp. 118-19.

<sup>2</sup> Courtois, *Histoire des banques en France*, p. 258.

<sup>3</sup> See Conant, "The National Bank of Belgium," National Monetary Commission, 61st Cong., 2d sess., *Senate Document No. 400*, p. 208.

The most thorough recent discussion of this subject occurred in the Bank Inquiry of 1908, made by authority of the German government with a view to the revision of the charter of the Reichsbank. The inquiry was conducted by a commission of the most competent bankers and economists in the empire and brought out forcibly the arguments for conferring the legal-tender quality, under modern conditions, upon the notes of a strong central bank, if the notes are to be given the same security as gold as a medium of exchange and a temporary store of value. The discussion was opened by Herr von Havenstein, then recently appointed governor of the Imperial Bank and chairman of the Commission of Inquiry. He pointed out that while the notes of the bank were not legal tender under the law then in force, this fact was known to only a limited number of persons and that it was desirable to bring the law into conformity with general practice and belief. He contended that in periods of crisis, when a demand sometimes arose for hoarding money, it was a demand for legal-tender currency to fulfil obligations, and not a demand arising from doubt of the ability to obtain gold for notes. It was declared by Herr von Havenstein: "It may likewise be assumed as certain that efforts to secure those means to pay, on the part of private persons as well as of the banks and other payment institutions, will be directed toward procuring as much as possible of that kind of money regarding which the possessor is sure that he can use it in payment under all circumstances—that is, money that is legal tender."<sup>1</sup>

It was the strongly expressed belief, not only of Herr von Havenstein, but of Dr. Adolph Wagner, the eminent economist, and Dr. Riesser, the banker and author, that the grant of the legal-tender quality to the notes would diminish the demand for gold—not merely by permitting persons who desired to hoard currency to hold notes instead of coin, but also by permitting the private banks to diminish the gold stocks which they had formerly held for the purpose both of fulfilling their own legal-tender obligations and of furnishing gold for the same purpose to clients. It was declared by the report submitted by the government with the bill

<sup>1</sup> "German Bank Inquiry of 1908," National Monetary Commission, 61st Cong., 2d sess., *Senate Document No. 407*, pp. 698–99.

which was presented to the Reichstag that "the bill, in making the notes of the Imperial Bank legal tender, is simply giving a firm legal basis to the existing situation, i.e., the acceptance of notes as instruments of payments in all monetary transactions."

In conferring the legal-tender quality upon the notes of the central bank, as was recommended by the commission with practical unanimity, several changes were made in the former law and practice which were designed to remove doubt that the notes were to be kept equal to gold. The provision of the old law—that notes might be redeemed in German currency—was changed to the requirement that they should be redeemed in "German gold coins." It was not deemed proper to confer the legal-tender quality upon the notes of the few surviving state banks of Germany; but, in order to make their notes also equal to coin as a medium of circulation, it was provided by the law of 1909 that the Imperial Bank should accept, at full face value, the notes of those banks which promptly fulfilled their obligations to redeem their notes in German gold coin, and that this service should be rendered, not only at the main office of the Imperial Bank in Berlin, but also at its branch offices, either in cities of more than 80,000 inhabitants or in the city where the issuing bank was located. The Imperial Bank was also required to issue its own notes in exchange for the notes of the state banks in the states where they were issued, so far as the supply of its own notes on hand permitted.<sup>1</sup>

Thus, in definite and positive form, after a thorough debate, the expert commission and the government of Germany accepted the view that the law should conform to general practice in treating bank notes, when redeemable in gold on demand, as legal tender for public and private obligations. The English law was not adopted in terms, because of its apparent implication that payments by the bank must be made in gold rather than notes, and the German bank desired to reserve the privilege of paying notes in its largely developed business of making credit transfers from one point to another in the empire.

<sup>1</sup> "Renewal of Reichsbank Charter," National Monetary Commission, 61st Cong., 2d sess., *Senate Document No. 507*, pp. 97-103.



When a new note system was provided for the United States in 1913, the question became of serious importance how far the notes of the central banking mechanism should be available as a part of the reserve in lawful money required to be held in prescribed proportions by the 7,500 national banks originating under the old law. The plan of the National Monetary Commission made the notes to be issued by the central reserve association receivable at par for government obligations in payments between banks and payments to banks.<sup>1</sup> In the act of December 23, 1913, establishing the federal reserve system, it was declared that the federal reserve notes "shall be obligations of the United States, and shall be receivable by all national and member banks and federal reserve banks, and for all taxes, customs and other public dues." The notes were thus given in effect what may be called a restricted legal-tender quality, their soundness being certified by the willingness of the federal government to accept them for public dues.

It was provided further that these notes should be redeemed in gold on demand at the Treasury Department of the United States, or in gold or lawful money at any federal reserve bank. In order to provide the necessary funds for redemption at the Treasury, the Federal Reserve Board is authorized to require each federal reserve bank to maintain a deposit in the Treasury in gold, sufficient, in the judgment of the Secretary of the Treasury, for the redemption of its federal reserve notes, but in no event less than 5 per cent of such notes outstanding; such deposit to be counted as part of the reserves of 40 per cent required by the law to be held against outstanding federal reserve notes.<sup>2</sup>

Surveying the field of note issue in the principal commercial countries, it appears that the policy outlined in this article is now generally in operation, subject only to the modifications arising from local conditions and the strength of the banking system. In those countries, like France, where the stock of gold in the bank and the amount in circulation are both large, it seems to be generally

<sup>1</sup> Report of the National Monetary Commission, 62d Cong., 2d sess., *Senate Document No. 243*, p. 68.

<sup>2</sup> Federal Reserve Act, December 23, 1913, sec. 16.

regarded as wise to have deferred any departure from the system which had grown up in practice until the necessity arose for a change. In case of war, however, involving any leading country, experience has shown that measures would be promptly taken to husband, as far as practicable, both the gold in circulation and that in the central bank of issue. The first step taken toward these ends would naturally be that of raising the rate of discount. Such a step, however, would probably not be effective if there were a strong disposition to export capital from the country in anticipation of serious disturbances in the economic order.

The suspension of gold redemption of bank notes and of the payment of gold to depositors by the central bank has been the next logical step in the process of husbanding the national gold stock. Such a step is usually the result of an enabling act by the government, imposing certain restrictions on the issue of notes, and not in response to any appeal or suggestion of the bank itself. While these measures would perhaps encounter the condemnation of the old school of political economy, experience has shown that it is not suspension of gold payments which causes the great depreciation in the value of paper during war time, but the overissue of such paper for the purposes of the government or fear that the assets of the bank will become impaired. Neither of these influences operated in the case of the suspension of specie payments by the Bank of France in 1870. The government did not abuse its power over the bank to gorge its assets with government obligations, nor was there any fear that the property of the bank would be lost or confiscated by the enemy, under the international law of private property respected by civilized nations.

The result of suspension under these circumstances by the Bank of France was a depreciation of not more than  $2\frac{1}{2}$  per cent in the value of the bank paper, and even this maximum was reached after the conclusion of peace, as a result of the heavy adverse balance of exchange created by the settlement of the war indemnity to Germany. For practical purposes, as pointed out by the eminent banker and scholar, the late Mr. Fischel, in the German Bank Inquiry of 1908, there was no depreciation of the notes of the Bank of France which had any obvious effect upon domestic transactions.

Almost inevitably, in case of specie suspension, the legal-tender quality must be conferred upon the paper circulation in order to prevent disputes between debtors and creditors and serious confusion in monetary transactions. The grant of the legal-tender quality to paper which is promptly redeemable in gold, as under the revision of the German bank charter in 1909, undoubtedly contributes to inspire a higher degree of confidence in the paper, to promote its continuous use in time of peace in lieu of coin, and to protect and enlarge the gold stock of the central bank of issue.

The theory that commercial operations are in effect the exchange of goods and services for other goods and services, and are not primarily for the accumulation of money, justifies the reduction of the money tool to the simplest and most economical form which carries with it complete security. The greatest security is obtained by the largest concentration of gold resources at one or a few centers, where they can be employed, in case of emergency, with something of the effectiveness of a reserve of fresh troops in a great battle. If the stock of gold thus held is adequate to support the entire credit fabric, nothing is gained and much may be lost by attempting to carry out the old theory of saturating the circulation with standard money.

Consideration must inevitably be given in any particular case to the state of credit and the custom and prejudices of the community. Where paper is viewed with distrust, because it is unfamiliar or because it has been discredited by excessive and depreciated issues, as in some of the less developed countries, a token coinage of silver representing less than its face value in gold, but supported by a gold reserve, may be preferable to paper as a means of inspiring confidence in the solidity of the circulation. Even in this field experience has shown that paper currency, when properly secured, soon makes its way, even among primitive peoples who have been accustomed to handling a medium of exchange consisting exclusively of metal. In the Philippine Islands, where a silver token coinage was authorized in 1903, soon after the American occupation, it was anticipated at first that there would be only a limited demand for the certificates of the deposit of coin which were authorized by the new law. Gradually, however, these cer-

tificates made their way into the favor of the natives. The amount of them in circulation had already risen on June 30, 1912, to 26,788,055 pesos (\$13,394,027), while the circulation of silver pieces for one peso, not including subsidiary silver, was only 13,178,751 pesos (\$6,589,375).

The essential factor in the maintenance of a sound monetary system has ceased to be exclusively the character of the currency itself; it is recognized that there must be taken into consideration, also, the great mass of short-term credit which is in constant circulation in the form of bills of exchange, drafts, and checks. It is because the circulation of bank notes has become subsidiary to this greater circulation of other credit instruments which transfer the titles to goods and services that the essential requirement of monetary solvency is that of a gold reserve adequate to the orderly functioning of the entire credit mechanism and the temporary supply of additional currency of gold or paper and of adequate international credits when they are demanded to fill the vacuum created by the breakdown of other credit functions; and for these ends the concentration of gold resources and the sufficiency of their ratio to the entire credit structure have become more important than their part in the circulation or their ratio to the elements which make up the circulation itself.

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